REMARKS

Claims 15, 17-19, 21, 23-24, 26, 30 and 32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. '701 or Johnson et al. '589, each in view of Greenwood. Applicants have repeatedly pointed out that in the embodiment of the Johnson et al. references where two or more melt-flowable layers are used, the layer with the **higher melt flow rate** is on **top** of the layer with the **lower melt flow rate**. This is in direct contrast to the sealant and flow control agent combination of the present invention, in which the layer with the **lower melt flow rate** (flow control agent) is on **top** of the layer with the **higher melt flow rate** (the sealant). The Examiner has asserted that this relationship is not clearly reflected in the claims. Accordingly, with this amendment, applicants have further amended independent claims 15, 26, 30, 31 and 32 to clarify that the claimed combination **consists of** a heat activated sealant and a flow control agent which **directly contacts and covers** at least a portion of the surface of the sealant. As applicants have amended all independent claims using "consisting of" language and reciting that the layers are in direct contact, it is believed to be clear that there are no intermediate layers present between the sealant and flow control agent.

The claims, as amended, clearly distinguish over the teachings of the Johnson et al. references and Greenwood. In the embodiments of Johnson et al. which teach the use of two melt flow layers, the layer with the higher melt flow rate is clearly on and above the surface of the layer with the lower melt flow rate. This configuration is intended so that the layer with the higher melt flow rate flows upon heating to encapsulate the layer with the lower melt flow rate, forming a smooth surface.

This clearly differs from the present invention, in which the sealant having a higher melt flow rate is positioned directly on the surface of the substrate and the flow control agent is positioned on the surface of the sealant to control the flow of the sealant and reduce sagging when the sealant is used to seal a gap or cavity in a part.

Further, the Johnson et al. references do not teach or suggest any configuration

in which the layer with the higher melt flow is in direct contact with the substrate. While the Examiner has asserted that the sealant layer of Johnson et al. is in intimate contact with the substrate, referring to Figs. 5a and 5b, those figures depict a one-layer melt flowable sheet, not a two-layer configuration. There is no teaching or suggestion in Johnson et al. of arranging melt flowable layers as claimed, nor is there any motivation to modify Johnson et al. as they desire only to provide a sealant over joints which forms a smooth surface to conceal defects, etc. There is no teaching or suggestion in Johnson that their melt-flowable layer(s) may be used to seal wide gaps or cavities in parts for the purpose of preventing excessive flow and sagging as taught and claimed in the present invention (see amended claim 15). Applicants note the Examiner's comment that "one skilled in the art would clearly envision the embodiments of the invention that would possess the claimed sagging properties," referring to Figs. 3b-3c of Johnson and reasoning that "the upper layer maintains its shape as the lower layer flows into the cavity." However, there is no teaching or suggestion in Johnson et al. that the two-layer configuration shown in Figs. 3a-3c is one having the claimed melt flow rate/configuration, i.e., a flow control agent over a sealant, where the sealant has the higher melt flow rate.

While the Examiner has opined that "a layer having a lower melt flow rate would provide less sagging to a composite than a single higher melt flow rate layer," the Examiner has not provided any evidence or reasoning as to how or why one skilled in the art would be motivated to place such layers in the claimed configuration, i.e., a layer having a lower melt flow rate **on top of** a layer having a higher melt flow rate. The Examiner's unsupported opinion is not sufficient to establish a prima facie case of obviousness. There is no teaching or suggestion in any of the references which suggests that providing a sealant and flow control agent having the claimed melt flow rates in the claimed configuration would provide reduced sagging over the use of a sealant alone as recited in amended claim 15.

With regard to Greenwood, which has been cited for teaching the use of a blowing agent in a sealant, the Examiner asserts that one would be motivated to include a blowing agent in the sealant of the Johnson et al. references because "Greenwood specifically teaches that blowing agents aid in the filling of gaps due to the expansion of the materials, " and the Johnson references are concerned with the filling of gaps "in certain applications." However, it is clear from reading Johnson et al. that the gaps referred to in Johnson are small gaps which are present at a joint, not large gaps or cavities which need to be filled in. See Johnson et al. '701 at col., 6, lines 13-15. Even if one were to make the proposed substitution, the claims would not be met as Johnson et al. do not teach or suggest the claimed configuration of a flow control agent and sealant. Claims 15, 17-19, 21, 23-24, 26, 30 and 32, as amended, are clearly patentable over the cited references.

Claims 28-29 and 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. '579 or Johnson et al. '701, each in view of Greenwood and further in view of Delle Donne et al. The Examiner has maintained that the term "pocket sealers" does not differentiate the claimed materials from the prior art. However, as previously pointed out, neither Delle Donne nor the Johnson references teach or suggest thermoforming their materials into a particular shape, i.e., a pocket sealer, as claimed. Nor is there any motivation to modify the Johnson et al. references to thermoform their melt-flowable layers as the Examiner has proposed. As applicants previously pointed out, thermoforming the layers of Johnson et al. into a particular shape would defeat the purpose of having a melt-flowable sheet which conforms to the surface of the substrate as desired by Johnson. While the Examiner asserts that it would have been obvious to preform the sheets to fit the gaps to further improve this conformity, applicants strongly disagree. There is no teaching or suggestion in Johnson et al. that forming their melt-flowable sheets into thermoformed parts would provide the desired smooth surface when applied to a substrate and heated. Claims 28-29 and 31 are clearly patentable over the cited references.

For all of the above reasons, applicants submit that claims 15, 17-19, 21, 23, 24, 26, and 28-32, as amended, are patentable over the cited references. Early notification of allowance is respectfully requested.

Respectfully submitted,

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